

# FPGA Accelerated Search

The company produces servers for extremely fast non-indexed data processing and search. The architecture is based on FPGA acceleration. DataArt developed Spark connector, Elasticsearch integration and cluster solution.

## Solution Highlights:

### Data platform integration.

DataArt team implemented Spark connectors to let business applications use power of servers using engine for big data processing.

**Data Storage.** Our team built an extension for Elasticsearch to integrate FPGA capabilities for fuzzy search.

**API.** DataArt implemented a web portal and cluster wide API engine to access FPGA enabled functionality.

## Key Figures:

- 48Tb single server data volume
- 10Gb per second processing speed
- 1TB fuzzy search benchmarking (5-nodes cluster vs 200-nodes Spark cluster)

